



# Chemistry

## scholarships and awards

Studying Chemistry at Valpo is a rigorous workout in critical thinking, equipping students for leadership in a variety of careers. Almost two-thirds of Valpo Chemistry majors attend graduate or professional schools. While studying at some of the nation's top universities, they consistently report that their undergraduate experience at Valpo prepared them well to compete with graduates of schools like University of Chicago and University of California–Berkeley. They credit a strong Chemistry background, their undergraduate research experience, intensive laboratory work, and a caring, accessible faculty with giving them the knowledge and confidence to succeed in the most demanding graduate programs.

Students receive hands-on learning using state-of-the-art laboratory instruments, including superconducting Fourier transform nuclear magnetic resonance spectrometer; Fourier transform infrared spectrometer; high performance liquid chromatograph; gas chromatograph and gas chromatograph/mass spectrometer; several uv-visible spectrophotometers including a diode array instrument and a microplate reader; refrigerated centrifuges; fluorescence polarization spectrometer; automated protein purification system.

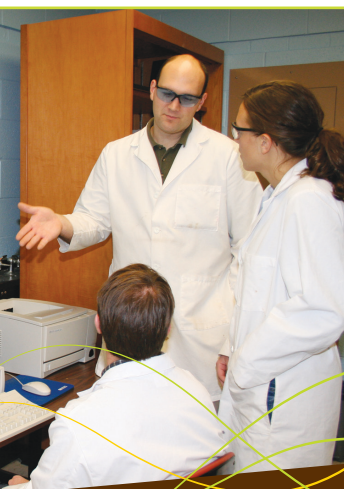
Small class sizes allow professors to critique students' work and provide meaningful feedback and informal mentoring. Interdisciplinary study opportunities include an Environmental Science major and minors in Business or Engineering, as well as coursework leading to licensure in science education or preparation for professional study in fields such as law, medicine, physical therapy, or pharmacy.

Chemistry majors may be eligible for any of the following: the Distinguished Chemistry Student Scholarship, Edith Lessor Memorial Scholarship, Charles W. Wolf Award, CRC Freshman Chemistry Award, ACS Polymer Education Division Organic Chemistry Award, ACS Analytical Division Chemistry Award, AIC Foundation Baccalaureate Student Award, and the William W. Steffen Senior Chemistry Award.

For more information on scholarships and awards, visit [valpo.edu/finaid](http://valpo.edu/finaid).

## an exceptional faculty

One hundred percent of Chemistry faculty members hold PhDs, and they, not graduate students, will teach your classes, serve as your academic advisors, and supervise all of your laboratories. Please visit [valpo.edu/chemistry/facultyandstaff](http://valpo.edu/chemistry/facultyandstaff) for more information about the Chemistry faculty at Valpo.



## extracurricular activities and special programs

### Undergraduate Research

Valpo Chemistry students commonly take advantage of the varied research opportunities available to them. Edra Jani and Rachel Troester conducted research with Professor Clark in which they investigated protein molecules that act as gas sensors, and presented their work at a national ASBMB conference. Professor Goyne is continuing a multi-year collaboration with DOE in which several students have worked in sequencing the genes of metal reducing enzymes. Wendy Marth received a grant from the Flora Richardson Foundation for her water quality research of restored wetlands in the Indiana Dunes National Lakeshore, which she presented at a National Park Service conference. Jared Friedhoff and Rebecca Sneed spent a summer researching nanocrystal applications at Vanderbilt University. Lindsey Gilman was selected as the top student in the nation at an ACS Nuclear Chemistry Summer Program.

### Chemistry-related Organizations

Many Chemistry students join the Chemistry Club, Pre-med Club, and/or EarthTones. Semi-annual picnics with students, faculty, and their

families are among social events sponsored by the student organizations in Neils Science Center, which rotate responsibility for hosting them. The Chemistry Club hosts both an annual “Mole Day Party” and a Regressive Dinner, and the Chemistry Department sponsors an intramural volleyball team. Valpo also shelters the Beta Sigma chapter of Phi Lambda Upsilon, a national Chemistry honor society.

### Chemistry in the Schools Outreach Program

Valpo students travel to local fifth grade classrooms and demonstrate chemistry experiments to the students

### Christ College

Valpo’s honors college offers a curriculum based on the liberal arts and the humanities that provides enriched learning to invited, academically talented students of all majors. Learn more about this special Valpo learning community at [valpo.edu/christc.academically](http://valpo.edu/christc.academically) talented students of all majors. Learn more about this special Valpo learning community at [valpo.edu/christc](http://valpo.edu/christc).

## recent alumni

**Patrick Long, '08** — Chemist at United Industries, St. Louis, MO

**Ashley (Coulter) Snyder, '07** — Inspector for the Indiana Department of Environmental Management

**Allison (Broadstone) Bergdoll, '03**, Indiana University Dental School, '07 — Practicing dentist in Ft. Wayne, IN

**Aster Kammrath '02**, PhD, University of California, Berkeley

'07 — Postdoctoral researcher at University of Wisconsin

## learn more — in person

See campus, meet a professor, and sit in on a class: Call Valpo’s Office of Undergraduate Admission at 219.464-5011 to schedule a personalized visit. Find out more information on visits at [valpo.edu/admission/visit](http://valpo.edu/admission/visit), and learn about Valpo students’ personal stories and experiences at [valpo.edu/whatsyourpart](http://valpo.edu/whatsyourpart).

## beyond-the-classroom opportunities

**Field trips** — Valpo’s location enables field trips to sites such as the Indiana State Police crime lab, Praxair, Inc., Bioanalytical Systems, Inc, Eli Lilly Laboratories, the History of Pharmacy Research Center, among others.

**Internships** — Valpo Chemistry students have opportunities to participate in internships with many companies and organizations including, in recent years, Eli Lilly, NASA, Argonne National Laboratories, Pratt and Whitney Rocketdyne, and Save the Dunes.

**Off-Campus Study** — You can take part in any of Valpo’s study-abroad programs on four continents or choose one of the off-campus semester programs within the United States.

**International Research Opportunities** — Danielle Nunnely and Deborah Steffen each spent a summer in Germany researching organic synthesis and biochemistry. Professor Schoer has twice taken students to China for three week trips to research water quality in Eastern China, in collaboration with scientists at Zhejiang University.

**Weekly Departmental Seminar** — Presenters share information about their research, area specialties, and careers. Recent lecture topics include titles such as “The Promise of Solar Energy” and “From Fighter Jet Fluids to Fighting Fungi: The Diverse Life of an Industrial Chemist.”